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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/820,629

04/08/2004

Naohisa Kasako

81940.0075

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24956

7590

08/08/2006

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EXAMINER

PEUGH, BRIAN R

ART UNIT

PAPER NUMBER

2187

DATE MAILED: 08/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/820,629

Applicant(s)

KASAKO ET AL.

Examiner

Brian R. Peugh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 32-34,38-48,50,53,54 and 76-88 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 32-34,38-48,50,53,54 and 76-88 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

This Office Action is in response to applicant's communication filed May 27, 2005 in response to PTO Office Action dated February 23, 2005. The applicant's remarks and amendment to the specification and/or claims were considered with the results that follow.

Claims 32-34, 38-48, 50, 53, 54, and 76-88 have been presented for examination in this application. In response to the last Office Action, claims 32-34, 38-48, 50, 53, and 54 have been amended. Claims 76-88 have been added.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 32-34, 38-48, 50, 53, 54, and 76-88 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 32 recites in paragraphs 4 and 8 that the second controller receives the changed data input request from the virtualization device. However, paragraphs 2 and 7 recite that the changed data input request is sent to the virtual volume, and there is no indication that the virtual device sends the changed data input request to the second controller. The Examiner is unaware of any recitation in the Specification that the second controller receives the changed input request from virtualization where the same request is also sent to the first logical volume.

The above argument directed to claim 32 also applies to claimed subject matter of independent claims 54, 78-80, and 88, as well as their corresponding dependent claims.

Claims 32-34, 38-48, 50, 53, 54, and 76-88 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 32 recites the limitation "said virtual volume" numerous times. There is insufficient antecedent basis for this limitation in the claim. The claim limitation should be amended to --said at least one virtual volume-- in order to correspond with the "at least one virtual volume" of lines 3-4.

Claim 78 recites the limitation "said virtual volume" numerous times. There is insufficient antecedent basis for this limitation in the claim. The claim limitation should be amended to --said at least one virtual volume-- in order to correspond with the "at least one virtual volume" of lines 3-4.

Claim 78 recites the limitation "said first logical volume" numerous times. There is insufficient antecedent basis for this limitation in the claim. The claim limitation should be amended to –said at least one first logical volume-- in order to correspond with the "at least one first logical volume" of line 7.

Claim 79 recites the limitation "said virtual volume" numerous times. There is insufficient antecedent basis for this limitation in the claim. The claim limitation should be amended to –said at least one virtual volume-- in order to correspond with the "at least one virtual volume" of lines 3-4.

Claim 79 recites the limitation "said first logical volume" numerous times. There is insufficient antecedent basis for this limitation in the claim. The claim limitation should be amended to –said at least one first logical volume-- in order to correspond with the "at least one first logical volume" of line 6-7.

Claim 80 recites the limitation "said virtual volume" numerous times. There is insufficient antecedent basis for this limitation in the claim. The claim limitation should be amended to –said at least one virtual volume-- in order to correspond with the "at least one virtual volume" of lines 3-4.

Claim 80 recites the limitation "said first logical volume" numerous times. There is insufficient antecedent basis for this limitation in the claim. The claim limitation should be amended to –said at least one first logical volume-- in order to correspond with the "at least one first logical volume" of line 7.

Claim 88 recites the limitation "said virtual volume" numerous times. There is insufficient antecedent basis for this limitation in the claim. The claim limitation should

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be amended to --said at least one virtual volume-- in order to correspond with the "at least one virtual volume" of line 3.

Claim 88 recites the limitation "said first logical volume" numerous times. There is insufficient antecedent basis for this limitation in the claim. The claim limitation should be amended to --said at least one first logical volume-- in order to correspond with the "at least one first logical volume" of line 8.

Dependent claims 38, 41-48, 53, and 83-87 also include the antecedent basis issues as disclosed above, and the Applicant is encouraged to amend the claims to provide the necessary antecedent basis.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian R. Peugh whose telephone number is (571) 272-4199. The examiner can normally be reached on Monday-Thursday from 7:00am to 4:30pm. The examiner can also be reached on alternate Friday's from 7:00am to 4:30pm.

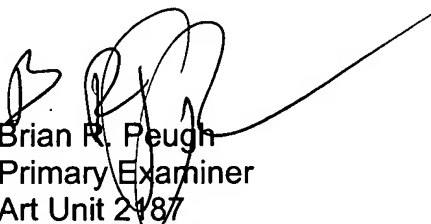
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Sparks, can be reached on (571) 272-4201. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Brian R. Peugh
Primary Examiner
Art Unit 2187
August 1, 2006